

New U.S. Application
Docket No. 32860-000624/US

~~Abstract~~ ABSTRACT OF THE DISCLOSURE

~~Method for producing and applying an antiscatter grid or collimator to an x-ray or gamma detector~~

The present invention relates to a method is for producing and applying an antiscatter grid or collimator to an x-ray or gamma detector having matrixially arranged detector elements (16) which form a detector surface with detection regions (16a) sensitive to x-radiation and/or gamma radiation and less sensitive intermediate regions (16b). In the method, a basic structure (6) is firstly produced for the antiscatter grid or collimator by ~~means~~ way of a rapid prototyping technique, through which transmission channels (5) and intermediate walls (6a) of the antiscatter grid or collimator are formed which have at least in a first direction a center-to-center spacing which is equal to or an integral multiple of a center-to-center spacing of the sensitive detection regions (16a) of the detector (7). The intermediate walls (6a) are coated with a material (14) which strongly absorbs x-radiation and/or gamma radiation in order to finish the antiscatter grid or collimator. Subsequently, the antiscatter grid or collimator is applied to the detector surface and connected to the detector surface in such a way that at least the intermediate walls (6a) running perpendicular to the first direction, or their coating (14), are situated over the less sensitive intermediate regions (16b) of the detector surface. A detector having an antiscatter grid or collimator in which no moiré interference occurs can thus be realized in a simple way ~~using the present method~~.

~~Figure 6~~